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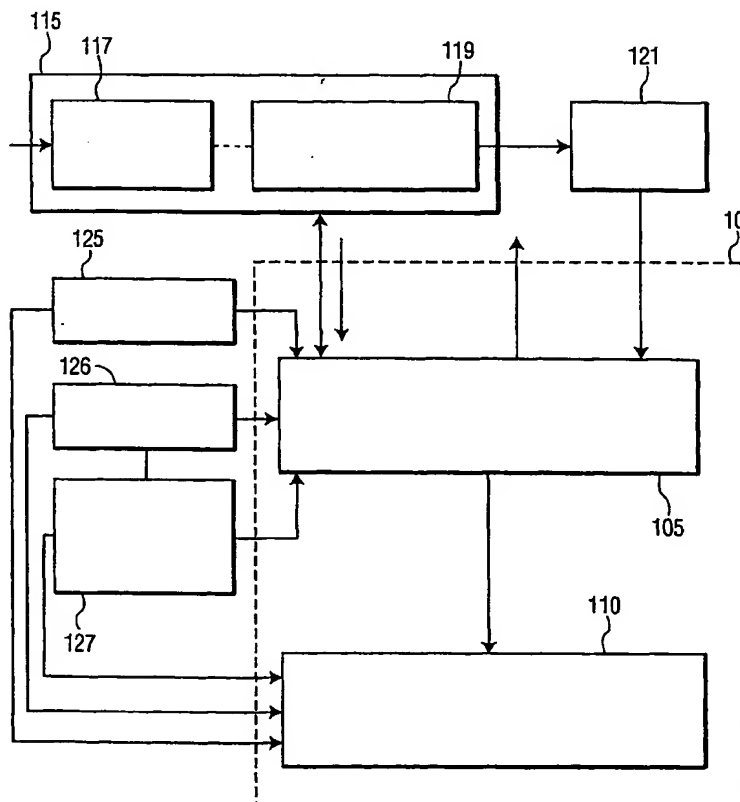
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(54) Title: A SYSTEM MANAGEMENT SCHEME FOR A SIGNAL-PROCESSING-BASED DECISION SUPPORT SYSTEM



(57) Abstract: A decision support system and a method for a signal processing system includes a video processing system for receiving and processing a video stream and providing a video output; a video quality evaluation module that receives the video output from the video processing system and evaluates the quality according to predetermined criteria; a video optimizer adapted for receiving the evaluated quality of the video output from evaluation module and level settings of parameters and for setting controls of the levels settings of parameters of video processing system, said video optimizer including a Multi Objective Genetic Algorithm (MOGA) engine, wherein the MOGA uses genetic algorithms to optimize the settings of controls for video processing system to optimize image quality at a predetermined level.



**Declaration under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations*

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